

# Considerations for a Second Tdap for the General Population

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On behalf of the Pertussis Vaccines Work Group

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## **WG Considerations for Not Recommending a Second Tdap**

- ❑ Recognition of increasing burden of pertussis**
- ❑ Second Tdap is safe and immunogenic**
- ❑ Protection wanes in few years after Tdap**
- ❑ Model suggests with second Tdap, reduction of disease burden would be limited**

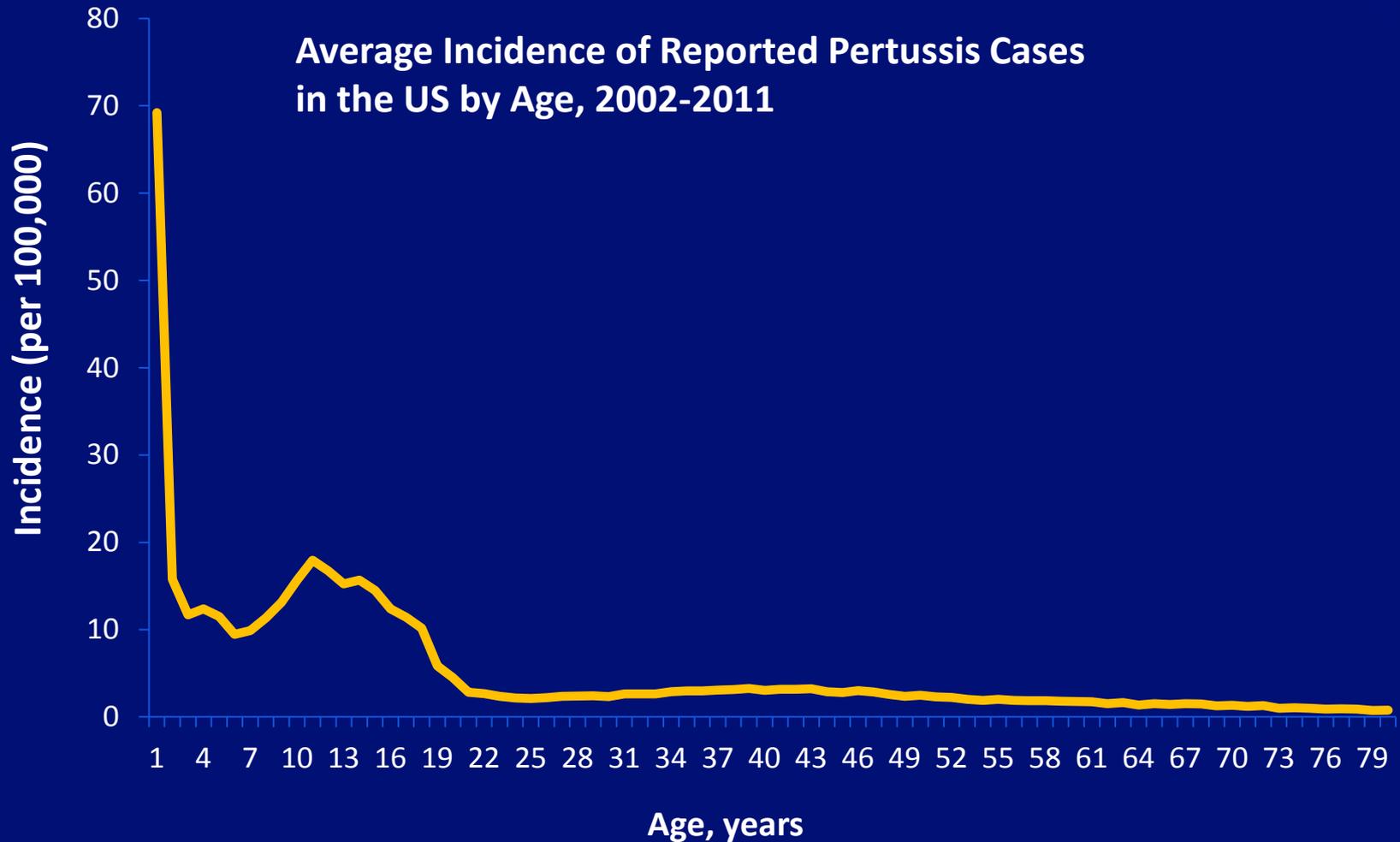
# Burden of Pertussis Has Been Increasing

Reported NNDSS Pertussis Cases: 1990-2012\*



\*2012 data are provisional as of June 1, 2013. Final data are expected August 2013.

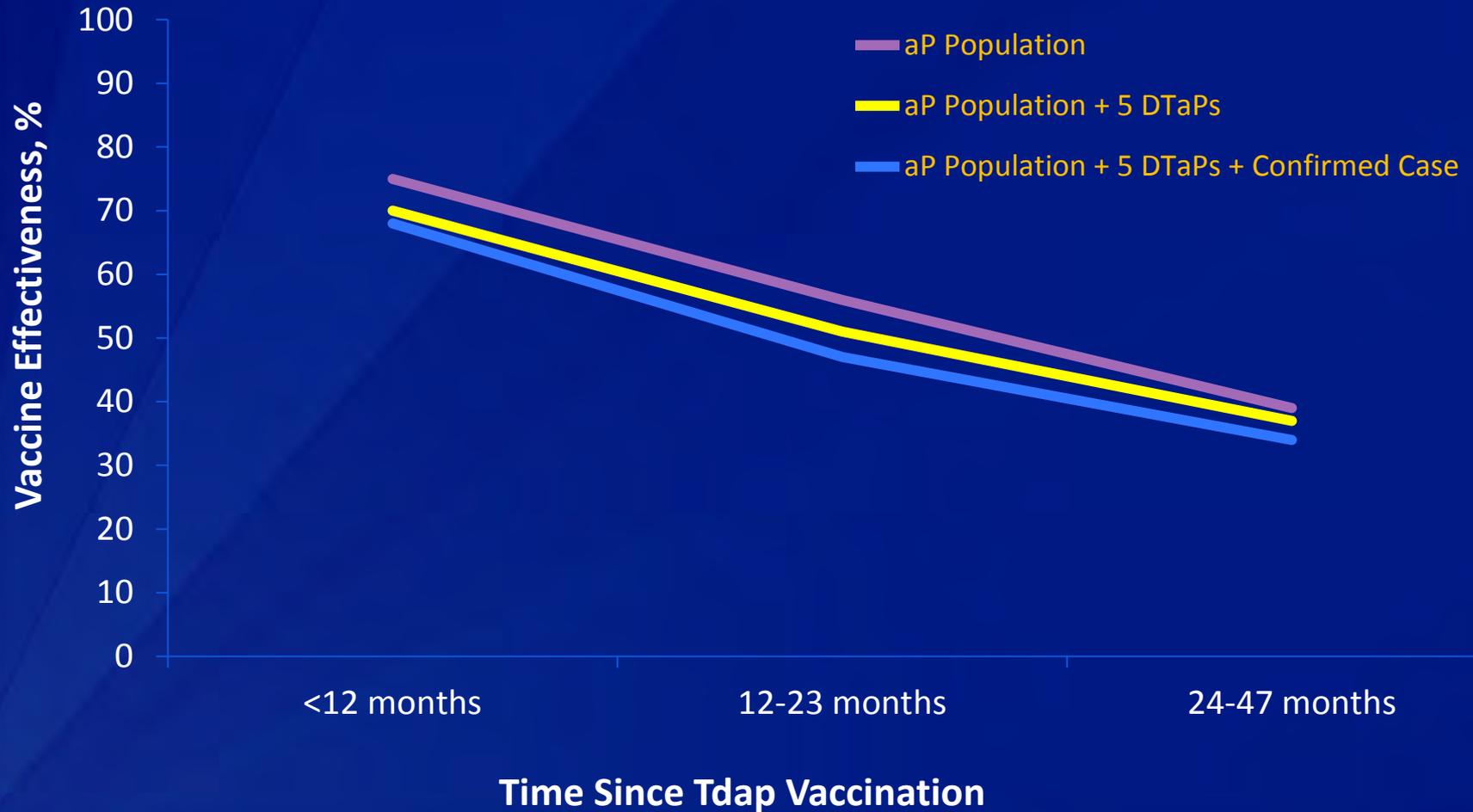
# Burden of Pertussis Changes with Age



## **Tdap Vaccines Are Safe and Immunogenic**

- ❑ Clinical trials support safety of 5- and 10-year intervals**
- ❑ Immune response to second Tdap similar but not greater than to first Tdap**
- ❑ Diphtheria and tetanus protection would persist for 5 to 10 years post-Tdap**
- ❑ Pertussis antibodies decline rapidly after first year, suggesting protection wanes**

# Pertussis Protection From Tdap Wanes in Few Years



## Model suggests with second Tdap, reduction of disease burden would be limited

- ❑ Cost effectiveness improves if assume underreporting
- ❑ Proportion of cases prevented small
  - Baseline conditions: 3.0-5.1%
  - Favorable conditions: 4.6-9.7%

## Work Group Conclusions

- ❑ **Data do not support recommendation for second Tdap in general population**
- ❑ **Work Group in agreement**
  - No change to current Tdap recommendation
  - Focus on preventing pertussis in infants
    - Pregnant women receive Tdap during each pregnancy
- ❑ **Universal recommendation for second Tdap not favored but willing to consider revaccination of “at risk” populations**
  - Anticipates limited impact on overall disease burden

## For ACIP's Consideration

- ❑ ACIP feedback to not recommend universal second Tdap
- ❑ Should the WG consider additional Tdap for “at risk” populations?
- ❑ Who should be included in “at risk” populations?

# DISCUSSION